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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,159	10/24/2003	Christopher B. Cobb	42717-1700	1656

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EXAMINER	
HANAN, DEVIN J	
ART UNIT	**PAPER NUMBER**
3745	

DATE MAILED: 05/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/693,159	COBB ET AL	
	Examiner	Art Unit	
	Devin Hanan	3745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,5,7-9,12-14 and 16-18* is/are rejected.

7)☒ Claim(s) *3,4,6,10,11,15 and 19-23* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *12/15/2003*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-2, 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beran et al. (U.S. Patent 5,785,723) in view of Gerteis (U.S. Patent 3,193,193).

Beran et al. discloses an air blower system with a compression unit (51) for compressing and directing airflow.

Beran et al. does not disclose a plenum chamber operatively connected to the compression unit, the plenum chamber having a plenum member forming an interior wall with a curvilinear interior surface, the plenum member curvilinear interior surface having a plurality of predetermined surface indentations to enable the formation of a predetermined amount of controlled local turbulence adjacent the curvilinear interior surface to reduce friction and suppress noise as the compressed air moves across the curvilinear interior surface.

However Gerteis teaches of a plenum chamber operatively connected to the compression unit, the plenum chamber (32) having a plenum member forming an interior wall with a curvilinear interior surface, the plenum member curvilinear interior surface (venturi shape 45, col. 3 lines 41-52) having a plurality of predetermined surface

indentations (formed by provisions for bolt holes 33) to enable the formation of a predetermined amount of controlled local turbulence adjacent the curvilinear interior surface to reduce friction and suppress noise (col. 1 lines 53-56) as the compressed air moves across the curvilinear interior surface(col. 3 lines 45-56).

Regarding claim 2, Beran et al. discloses an air blower system with an air filter, the air filter positioned to filter air before (60) and after (45) induction to the compression unit.

Regarding claims 5 and 7, Beran et al. does not disclose a plenum member with a curvilinear interior surface with indentations that are irregular to reduce friction and suppress noise with harmonic vibration components where the surface indentations are irregular.

However, Gerteis teaches of a plenum member with a curvilinear interior surface (col. 3 lines 45-56) with indentations (formed by provisions for bolt holes 33) that are irregular (irregularity due to walls 45 and overall elliptical shape) to reduce friction and suppress noise (col. 1 lines 53-56) with harmonic vibration components where the surface indentations are irregular.

Since Beran et al. and Gerteis are from the same field of endeavor, air blower systems, the purpose disclosed by Gerteis would have been recognized in the pertinent art of Beran et al. It would have been obvious at the time the invention was made to one having ordinary skill in the art to add the curvilinear interior surface plenum with irregular surface indentations of Gerteis to the air blower of Beran et al. in order to make

sure the air blower system is not a significant source of airborne noise (col. 1 lines 53-56).

Claims 8, 9, 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beran et al. in view of Gerteis.

Beran et al. discloses an air blower system with a compression unit (51) for compressing and directing airflow; and

a heater unit (53) for heating directed air.

Beran et al. does not disclose a plenum chamber operatively connected to the compression unit, the plenum chamber having a plenum member forming an interior wall with a curvilinear interior surface, the plenum member curvilinear interior surface having a plurality of predetermined surface indentations to enable the formation of a predetermined amount of controlled local turbulence adjacent the curvilinear interior surface to reduce friction and suppress noise as the compressed air moves across the curvilinear interior surface.

However Gerteis teaches of a plenum chamber operatively connected to the compression unit, the plenum chamber (32) having a plenum member forming an interior wall with a curvilinear interior surface, the plenum member curvilinear interior surface (venturi shape 45, col. 3 lines 41-52) having a plurality of predetermined surface indentations (formed by provisions for bolt holes 33) to enable the formation of a predetermined amount of controlled local turbulence adjacent the curvilinear interior

surface to reduce friction and suppress noise (col. 1 lines 53-56) as the compressed air moves across the curvilinear interior surface(col. 3 lines 45-56).

Regarding claim 9, Beran et al. discloses an air blower system with an air filter, the air filter positioned to filter air before (60) and after (45) induction to the compression unit.

Regarding claims 14 and 16, Beran et al. does not disclose a plenum member with a curvilinear interior surface with indentations that are irregular to reduce friction and suppress noise with harmonic vibration components where the surface indentations are irregular.

However, Gerteis teaches of a plenum member with a curvilinear interior surface (col. 3 lines 45-56) with indentations (formed by provisions for bolt holes 33) that are irregular (irregularity due to walls 45 and overall elliptical shape) to reduce friction and suppress noise (col. 1 lines 53-56) with harmonic vibration components where the surface indentations are irregular.

Since Beran et al. and Gerteis are from the same field of endeavor, air blower systems, the purpose disclosed by Gerteis would have been recognized in the pertinent art of Beran et al. It would have been obvious at the time the invention was made to one having ordinary skill in the art to add the curvilinear interior surface plenum with irregular surface indentations of Gerteis to the air blower of Beran et al. in order to make the sure the air blower system is not a significant source of airborne noise (col. 1 lines 53-56).

Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beran et al. in view of Gerteis and further in view of Arnold (U.S. Patent 6,254,337).

Beran et al., as modified in the rejection of claim 8 above, discloses all of the above mentioned elements, but does not disclose a mounting apparatus for releasably mounting the warm air blower system to a mounting member where the mounting member is a support pole, a bed, or a floor-rolling cart.

However, Arnold teaches of a mounting apparatus for releasably mounting the warm air blower system to a mounting member where the mounting member is a support pole (figure 12), a bed (figure 4), or a floor-rolling cart (figure 2) in order to position the air blower system appropriately (col. 5 lines 50-63).

Since Beran et al. and Arnold are in the same field of endeavor, air blower systems, Arnold would have been recognized in the pertinent art of Beran et al. It would have been obvious at the time the invention was made to one of ordinary skill in the art to add the mounting apparatus of Arnold to the air blower system of Beran et al. in order to position the air blower system appropriately.

Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beran et al. in view of Gerteis and further in view of Panetta (U.S. Patent 5,383,918).

Beran et al., as modified by Gerteis in the rejection of claim 8 above, discloses all of the above mentioned elements, but does not disclose a temperature sensor.

However, Panetta teaches of a temperature sensor (117) for measuring the temperature of the heated air; the temperature sensor being located in close proximity (col. 6 lines 53-55) to where the heated air is supplied to a cooperative unit and a control unit to control and monitor the temperature of the heated air, the control unit allowing the selection of a predetermined set temperature of the heated air, the control unit capable of testing the operability of the warm air blower system, the control unit being responsive to a heated air over-temperature condition, the control unit being responsive to a heated air under-temperature condition (col. 6 lines 44-58) to prevent overheating or overcooling of the patient (col. 6 lines 55-58).

Regarding claim 18, Beran et al. does not disclose the control unit allowing selection of ambient temperature so that unheated air is delivered by the warm air blower system.

However, Panetta teaches of the control unit allowing selection of ambient temperature so that unheated air is delivered by the warm air blower system (col. 7 lines 26-35) to utilize a second type of air heating or cooling.

Since Beran et al. and Panetta are from the same field of endeavor, warm air blowing systems, Panetta would have been recognized in the pertinent art of Beran et al. It would have been obvious to one of ordinary skill in the art at the time the invention was made to add the temperature sensor, control unit and ambient air functions of Panetta to the warm air blower of Beran et al. in order to prevent overheating or overcooling the patient and to utilize a second type of air heating or cooling.

Allowable Subject Matter

Claims 3, 4, 6, 10, 11, 15 and 19-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Prior Art

The patent to McConnell (U.S. Patent 6,039,532) was cited to for the teaching of using **perforations** in a blower fan in order to control noise.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Devin Hanan whose telephone number is 571-272-6089. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look can be reached on 571-272-4820. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Devin Hanan
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5/2/05